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| APPLICATION NO.                                  | FILING DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-------------------|----------------------|---------------------|-----------------|
| 10/580,324                                       | 05/18/2007        | Guillaume Bouche     | S1022.81158US00     | 5686            |
| 46329 7590 10/31/2008<br>STMicroelectronics Inc. |                   |                      | EXAM                | UNER            |
| c/o WOLF, GI                                     | REENFIELD & SACKS | AHMED, SELIM U       |                     |                 |
| 600 Atlantic A<br>BOSTON, MA                     |                   |                      | ART UNIT            | PAPER NUMBER    |
|  |                   |                      | 2826                |                 |
|  |                   |                      | MAIL DATE           | DELIVERY MODE   |
|  |                   |                      | 10/31/2008          | PAPER           |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

| Application No. | Applicant(s)      |  |  |
|-----------------|-------------------|--|--|
| 10/580,324      | BOUCHE, GUILLAUME |  |  |
| Examiner        | Art Unit          |  |  |
| SELIM AHMED     | 2826              |  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS.

- WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  - after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

|             | ed patent term adjustment. See 37 CFR 1.704(b).   |
|-------------|---|
| Status      |   |
| 1)🛛         | Responsive to communication(s) filed on 14 October 2008.  |
| 2a) <u></u> | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.   |
| 3)          | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |
|             | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                       |
| Disposit    | ion of Claims   |
| 4)⊠         | Claim(s) 1-10 is/are pending in the application.  |

- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-6 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

# Application Papers

9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

# Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received.
  - 2. Certified copies of the priority documents have been received in Application No.
  - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* See the attached detailed Office action for a list of the certified copies not received.

| Attac | hment(s |
|-------|---------|
|-------|---------|

- 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (FTO/SE/08) Paper No(s)/Mail Date 05/24/2006

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. \_\_ Informal Patent Application

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|------|------------|------|
| 6) [ | Other      |      |

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# DETAILED ACTION

## Election/Restrictions

- Applicant's election of Group I, including claims 1-6 in the reply filed on 10/14/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818,03(a)).
- 2. Preliminary amendment filed has been entered on 05/24/2006.

# Priority

 Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed on 05/24/2006.

#### Information Disclosure Statement

 The Information Disclosure Statements filed on 05/24/2006 have been considered.

#### Oath/Declaration

5. The oath or declaration filed on 05/18/2007 is acceptable.

## Drawings

6. The drawings filed on 05/24/2006 are acceptable.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Cabuz et al (US 6,767,190; Cabuz hereinafter)

With regard to claim 1, Cabuz discloses an integrated circuit chip e.g. Fig. 1 including a pump e.g. Fig. 1 comprising: a cavity 12 formed in an insulating substrate 10 (col. 4, lines 22-39), a upper portion of the substrate located in the vicinity of the cavity forming a border (e.g. Fig. 1), a conductive layer 30 covering the inside of the cavity all the way to the border and possibly covering the border, a flexible membrane 22, formed of a conductive material (col. 4, lines 40-49), placed above the cavity and bearing against the border, a dielectric layer (col. 4, lines 50-57) covering the conductive layer or the membrane to insulate the portions of the conductive layer and of the membrane which are close to each other, and terminals of application of a voltage (col. 4, lines 7-9) between the conductive layer and the membrane; at least one of the ventilating ducts 40, 44, 42 emerging into the cavity.

With regard to claim 2, e.g. Fig. 1 of Cabuz discloses the integrated circuit chip of claim 1, wherein said cavity has substantially the shape of a cup so that the interval between the conductive layer and the membrane progressively increases from the border to the bottom of the cavity.

With regard to claim 3, col. 3-4, lines 66-9 of Cabuz discloses the integrated circuit chip of claim 1, wherein the membrane is in an idle state when no voltage is applied between said terminals, the application of a voltage deforming the membrane by drawing it closer to the conductive layer, the suppression of the voltage bringing the membrane back to its idle state.

With regard to claim 4, e.g. Fig. 1 of Cabuz discloses the integrated circuit chip of claim 1, wherein a single duct emerging substantially at the bottom of the cavity.

With regard to claim 5, e.g. Fig. 1 of Cabuz discloses the integrated circuit chip of claim 1, wherein one duct emerges substantially at the bottom of the cavity, of the pump, and another duct emerges close to the border of the pump.

With regard to claim 6, e.g. Fig. 1 of Cabuz discloses the integrated circuit chip of claim 1, wherein the ventilating ducts are formed at least in part in the semiconductor substrate of the integrated circuit.

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#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SELIM AHMED whose telephone number is (571)270-5025. The examiner can normally be reached on 9:00 AM-6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571)272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.